

WHAT IS CLAIMED IS:

1. A remote data acquisition and transmission system for beverage dispensing equipment, comprising:

- a plurality of application controllers, each  
5 application controller interfacing with remote beverage dispensing equipment from which operation data is acquired by the application controller; and  
an application host communicating with the application controllers via a local area network, the  
10 application host comprising a wide area network interface for communicating with a network operations center.

2. The system of Claim 1, wherein:

- the local area network is supported by wireless  
15 transmissions; and  
the application host and each application controller comprise a wireless LAN transceiver for communicating via the local area network.

3. The system of Claim 1, wherein:

- the local area network is supported by wire-line transmissions; and  
the application host and each application controller  
comprise a wire-line LAN transceiver for communicating  
25 via the local area network.

4. The system of Claim 1, wherein at least one of the application controllers operates as a relay for another application controller for communications to the  
30 application host.

5. The system of Claim 4, wherein the application controllers and the application host operate to autoconfigure the local area network upon initialization.

5 6. The system of Claim 5, wherein the autoconfiguration comprises application controllers operating as relays when necessary to establish communication between the application host and other application controllers.

10

7. The system of Claim 1, wherein the application host is directly connected to and associated with one of the application controllers.

15

8. The system of Claim 1, wherein the wide area network interface of the application host comprises a WAN wireless transceiver.

9. The system of Claim 8, wherein the WAN wireless  
20 transceiver communicates across a narrowband PCS network.

10. The system of Claim 1, wherein the wide area network interface of the application host comprises a WAN wire-line interface.

25

11. The system of Claim 1, wherein the operation data acquired from the beverage dispensing equipment comprises product dispensing and inventory data.

12. The system of Claim 1, wherein the operation data acquired from the beverage dispensing equipment comprises equipment status data.

5 13. The system of Claim 1, further comprising a network operations center communicating with the application host via a wide area network to receive the operation data acquired by the application controllers.

10 14. The system of Claim 13, wherein the network operation center maintains a database storing the operation data and provides secure third party access to the database.

0922016.080601

15. A remote data acquisition and transmission system for beverage dispensing equipment, comprising:

a plurality of application controllers, each

- 5 application controller interfacing with a beverage dispensing controller of a beverage dispensing device from which operation data is acquired by the application controller;

an application host communicating with the

- 10 application controllers via a local area network, the application host comprising a wide area network interface for communicating with a network operations center; and

the network operation center communicating with the application host via a wide area network to receive the

- 15 operation data acquired by the application controllers;

the application controllers and the application host operating to autoconfigure the local area network upon initialization, the application controllers operating as relays when necessary to establish communication between

- 20 the application host and other application controllers; and

the network operation center maintaining a database storing the operation data and providing third party access to the database.

25

16. The system of Claim 15, wherein:

the local area network is supported by wireless transmissions; and

- the application host and each application controller  
30 comprise a wireless LAN transceiver for communicating via the local area network.

17. The system of Claim 15, wherein:

the local area network is supported by wire-line transmissions; and

5 the application host and each application controller comprise a wire-line LAN transceiver for communicating via the local area network.

18. The system of Claim 15, wherein the application  
10 host is directly connected to and associated with one of the application controllers.

19. The system of Claim 15, wherein the wide area network interface of the application host comprises a WAN  
15 wireless transceiver.

20. The system of Claim 15, wherein the wireless transceiver communicates across a wide area wireless data network.

20

21. The system of Claim 15, wherein the wide area network interface of the application host comprises a WAN wire-line interface.

22. The system of Claim 15, wherein the operation  
25 data acquired by each beverage dispensing device comprises product dispensing and inventory data.

23. The system of Claim 19, wherein the operation  
30 data acquired by each beverage dispensing device comprises equipment status data.

24. The system of Claim 19 further comprising  
operation data communicated to each beverage dispensing  
device including configuration information, firmware and  
5 other information used to operate the beverage dispensing  
device.

09223045-080601  
109080-94032660

25. A method for remote data acquisition and transmission, comprising:

interfacing at least one of application controller with at least one remote beverage dispensing device from  
5 which operation data is acquired by the application controller;

communicating between an application host and each application controller; and

communicating between the application host and a  
10 network operations center using a wide area network interface.

26. The method of Claim 25 further comprising:

interfacing at least two of the application  
15 controllers with respective remote beverage dispensing devices; and

communicating between the application host and the application controllers via a local area network.

20 27. The method of Claim 26, wherein communicating via the local area network is supported by wireless transmissions using wireless LAN transceivers.

28. The method of Claim 26, wherein communicating  
25 via the local area network is supported by transmissions over a wire-line interface using wire-line LAN transceivers.

29. The method of Claim 26, further comprising  
30 operating at least one of the application controllers as

a relay for another application controller for communications to the application host.

30. The method of Claim 26, further comprising  
5 autoconfiguring the local area network upon initialization.

31. The method of Claim 30, wherein the  
autoconfiguring comprises application controllers  
10 operating as relays when necessary to establish communication between the application host and other application controllers.

32. The method of Claim 25, further comprising  
15 directly connecting the application host with at least one of the application controllers.

33. The method of Claim 25, wherein communicating  
between the application host and a network operations  
20 center uses a wide area network interface comprising a WAN wireless transceiver.

34. The method of Claim 33, wherein the WAN  
wireless transceiver communicates across a digital paging  
25 network.

35. The method of Claim 25, wherein communicating  
between the application host and a network operations  
center uses a wide area network interface comprising a  
30 WAN wire-line interface.



36. The method of Claim 25 further comprising communicating firmware from the network operations center to the application host.

5 37. The method of Claim 36 further comprising communicating the firmware from the application host to the application controller.

10 38. The method of Claim 25, further comprising communicating between a network operation center and the application host via a wide area network to receive the operation data acquired by the application controllers.

15 39. The method of Claim 25, further comprising, at the network operation center, maintaining a database storing the operation data and providing secure third party access to the database.

20 40. The method of Claim 39, wherein the secure third party access is provided via a web browser connecting across an internet based network.

09423045.030601

41. An application controller for use as part of a remote data acquisition and transmission system for a beverage dispensing device, the controller comprising:

- a microprocessor connected with a memory unit;
- 5 a number of sensors to acquire data and a serial interface connected with the microprocessor to provide data thereto from the sensors;
- a hardware interface bus for providing information to the microprocessor from other components of the
- 10 system;
- a LAN transceiver for communicating over a local area network; and
- a power supply.

09923046.080601

42. A remote data acquisition and transmission system for beverage dispensing equipment, the system comprising:

an application controller;

5 an application host operably coupled to the application controller;

the application controller operably coupled to and interfacing with remote beverage dispensing equipment from which operating data is acquired by the application  
10 controller; and

the application host including a wide area network interface for communicating with a network operations center.

15 43. The system of Claim 42, wherein the application host is directly connected to and associated with the application controller.

44. The system of Claim 42, wherein the wide area  
20 network interface of the application host comprises a WAN wireless transceiver.

45. The system of Claim 44, wherein the WAN  
25 wireless transceiver communicates across a wireless data network.

46. The system of Claim 42, wherein the wide area network interface of the application host comprises a WAN wire-line interface.

30

47. The system of Claim 42, wherein the operation data acquired from the beverage dispensing equipment comprises product dispensing and inventory data.

- 5        48. The system of Claim 42, wherein the operation data acquired from the beverage dispensing equipment comprises equipment status data.

- 10       49. The system of Claim 42, further comprising a network operations center communicating with the application host via a wide area network to receive the operation data acquired by the application controllers.

- 15       50. The system of Claim 42, wherein the network operation center maintains a database storing the operation data and provides secure third party access to the database.

09923046-08604  
109080-94022660